HYPOXYLON INSIDENS, (Schw.) Syn. Car. No. 122.—(Fuckelia insidens (Schw.) Cke. Grev. XII, p. 52.) On rotten wood or oftener on bark, Carolina and Penna. (Schw.) Stroma innate, effused, nearly round, brown-black, partly sterile, apparently superficial, but the base immersed in the matrix and surrounded by a faint circumscribing line. Perithecia more or less prominent, flexuous, subpapillate, half as large as a mustard seed. Asci cylindrical, sporidia uniseriate, elliptical, pale-brown, 8 x 4 micr. According to Mr. W. C. Stevenson Jr., the specimens in N. A. F. 164, labeled *H. serpens*, agree with the specimens of H. insidens, Schw, in Herb. Schw.

HYPOXYLON COLLICULOSUM, Schw. Syn. Car. No. 82.—On rotten oak wood, Carolina & Penna. (Schw.) On bark of rotten ash, seaboard of S. C. (Rav. F. Am. 742)? Effused thin, colliculose, rugose, black. Perithecia very large, covered with a thin crust which is papillate from the minute ostiola, and with flattened bases not immersed in the wood nor surrounded by any circumscribing line, subdistant but connected by the stromatic crust. Margin various, shining as if oiled, surface very uneven and rimose. Sporidia 12—13 x 5 (Cke.) As already stated, the specimens in Rav. F. Am. do not agree with the description of *H. colliculosum* having both perithecia and sporidia too small and are probably referable to *H. insidens*, Schw.

NEW SPECIES OF KANSAS FUNGI.

BY W. A. KELLERMAN AND W. T. SWINGLE.

SPHÆROTHECA PHYTOPTOPHILA, Kell. & Swingle.—Mycelium very sparse: perithecia globular, dark brown or black, obscurely reticulate, 60—80 micr., mostly 65—75 micr. in diameter; appendages few, more or less evanescent, dark brown, irregular but usually about 6 micr. in diameter and mostly longer than the diameter of the perithecia, often septate. Asci large, hyaline, broadly oval, containing 8 spores, which are hyaline, oval, regular in size, 15 x 24—18 micr. Conidial stage: mycelium more abundant, conidiophores hyaline, erect, total height (including

conidia) 150—220 micr., by 9—13 micr. in diameter; conidia oval hyaline, continuous, granular within, 15 x 21—29, mostly 15 x 27 micr. On *Celtis occidentalis*, Manhattan, Kansas.

The fungus is found associated with *Phytoptus* (an undescribed species) on Hackberry (Celtis). The distortions caused by the insect, or perhaps by both insect and fungus, consist of a multitude of abnormal, more or less abortive branchlets that form a compact knot, ½ to 1½ inches in diameter; a few of the branchlets are prolonged a few inches and themselves bear smaller knots of similar structure. The abortive branchlets have excessively numerous buds all infested by the insect and covered by the fungus. The conidial stage is found associated with the perithecia and sometimes even extending out on the twigs to the under side of the leaves. The perithecia are found in the spring but do not mature their spores till late fall or winter.

SEPTORIA CASSIÆCOLA, Kell. & Swingle.—Perithecia occupying indefinite portions of the languishing cotyledons of Cassia chamæcrista, abundant but not crowded, amphigenous, small, sub-immersed, black, 70—90 micr. in diameter. Sporules filiform, straight or slightly curved, continuous, hyaline, variable, 20—40 x ½—1½, often 36 x 1½ micr. May 1888, Manhattan, Kansas.

COLLETOTRICHUM CARPOPHILUM, Kell. & Swingle.—Spots depressed, orbicular, often confluent and occupying the greater portion of the lower side of the fruit, ½—1 cm. in diameter, brownish or dusky, centre of spot pallid, usually surrounded by a reddish margin. Acervuli numerous, crowded black, applanate, variable in size. Bristles rather abundant, black, dusky, usually curved more or less, regularly tapering from base to the acutish point, 60—100 micr. in length, 5—6 micr. in width at base. Sporules arcuate, fusoid, acute at both ends, 16—22 x 2½—4. Mostly 18—21 x 3—3½, nucleate. On living fruit of *Astragalus Caryocarpus*, May and June, 1888, Manhattan, Kansas.

CERCOSPORA CEANOTHI, Kell. & Swingle.—Spots reddish-brown or russet, circular or subcircular, seldom confluent, abundant, equally distinct on both sides of the leaf, 1—5 (mostly 2—4) millimeters. Hyphæ pale brown, continuous or very rarely septate, simple, often nucleate, subnodulose above, hypophyllous sometimes amphigenous, densely fasciculate, 20—36 x 3—4½, forming minute tufts which are congregated in the centre of the spot. Conidia curved or straight, narrowly cylindrical or

slightly attenuated, ends obtuse, 3—6 septate, mostly 4—5 septate, hyaline 45—90 x 2—4. A Macrosporium sometimes occurs sparingly on the same spots. On *Ceanothus ovatus*, Manhattan, Kansas.

PUCCINIA SCHEDONNARDI, Kell. & Swingle.—II. Sori amphigenous, but mostly hypophyllous, soon erumpent, surrounded by the ruptured epidermis, small (one-fifth to one-half millimetre in diameter) oval or oblong, solitary. Uredospores dull orange, globular, 20—25 micr. diameter, mostly 22 micr., always free from pedicels when mature, covered with short sparse tubercles; pedicels subpersistent, hyaline or slightly tinted, enlarged at tip, base 3—5 micr. in diameter, tip 5—8 micr.

III. Sori amphigenous, small (one-sixth to one-half millimetre in diameter) mostly circular, solitary or rarely confluent, though often abundant; teleutospores clear brown slightly constricted at the middle and often slightly thickened at the apex, subglobose, oval or oval-oblong, 27—35 x 20—26, mostly 28—30 x 21—24, pedicel variable, tapering, tinted, usually once to thrice as long as the spores. On leaves and sheaths of *Schedonnardus Texanus*. II. July and August, III. fall and winter 1888, Manhattan, Kansas.

ÆCIDIUM FUMARIACEARUM, Kell. & Swingle.—Spots none; æcidii growing on stem, petioles and leaves of Corydalis aurea. var. occidentalis, and on petioles and leaves of Dicentra cucullaria; when on leaves occupying definite areas, somewhat crowded, amphigenous but mostly hypophyllous, more scattered on the stems which are more or less distorted. Peridium cylindrical, short ($\frac{1}{4}$—$\frac{1}{2}$ millimetre long), $\frac{1}{4}$—$\frac{1}{3}$ millimetre in diameter; margin usually irregularly torn, moderately reflexed, the peridial cells crumbling away and leaving the margin nearly even and entire, white below, polygonal, mostly longer than broad, above nearly oval, 27—36 x 12—27, mostly 24 - 30 x 15—24. Spores globose or globose-oval, dull orange yellow, cell-wall rather thin, surface covered with numerous minute tubercles, 18—24 x 16—20, mostly 20—24 x 17—19. On Corydalis aurea. var. occidentalis and Dicentra cucullaria April and May, 1888, Manhattan, Kansas, also sent by M. A. Carleton from Wichita (No. 88) and Cloud County (No. 88a.) Differs from *Aecidium Dicentræ*, *Trelease*, in its smaller, clustered perithecia and larger spores.

CORRECTION.

At the top of pages 87, 89 and 91 of the current No. of "New Fungi" read *Synopsis of Hypoxylon.*